Hæmorrhoides

Haemoptysis

Save

Haemoptysis.

1809.

Joel Martin

Wm Cherry M.

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No. 1

An Inaugural dissertation
on
Hæmoptysis
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Among the various hæmorrhagies to which the system is liable (if we except epistaxis) none appear to occur more frequently than those from the lungs, and if the structure and situation of these viscera be attended to the reason will at once be obvious. When examined they appear to be of a delicate spongy like substance being made up of an infinite number of membranous cells, and of vessels spread among them in innumerable and very minute ramifications; these vessels from their vicinity to the heart enter the lungs of the largest size and are more immediately subdivided than in any other part; in their distribution too they are surrounded only by a very thin cellular substance which can offer no resistance to their rupture, hence then the frequency of hæmoptysis cannot excite our surprise.

When blood is ejected by coughing from the mouth after a previous affection of the chest we can have but little doubt of its origin, but we may in general be confirmed in our opinion by attending to concomitant symptoms. There are cases however in which the blood is from other sources, as from the adjoining cavity of the nose, fauces and stomach, it then becomes a matter of importance to determine with some accuracy and to enable

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ons to do this they shall be noticed when we come to treat of the symptoms of hæmoptysis. — Of its causes. — These I shall divide into remote, predisposing, exciting and proximate, and 1st of the remote, — among these may be enumerated, malconformation of the thorax either derived from ancestors or acquired by disease, sedentary occupations, hence taylors shoemakers &c most subject to it, intemperance in eating and drinking, lifting heavy weights or making use of great bodily exertions, the debilitating passions of the mind as fear grief & despair &c, catarrh, external violence, suppression of accustomary evacuations as of the menses, hæmorrhoids &c repelled eruptions, sudden growth about the age of puberty &c. — 2d of the predisposing. — Under this head debility alone will be mentioned it being the predisposing cause of all diseases. This might easily be proved by the different symptoms and other circumstances commonly attendant upon diseases in general, such as coldness and shivering, weakness of different parts of the body and drowsiness, together with a weak and quick pulse — also from the particular time in which they attack as at night when the system is much debilitated from the different employments and exposures during the day. — That it is the predisposing cause of this is evinced — From the above mentioned causes

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all of which have a tendency either directly or indirectly to produce it. From its occurring in those states of the system in which there is great prostration of strength from exertions of body or mind and at a time too when the lungs are in a passive state as when the patient is sitting or lying, and during sleep. From persons leading sedentary lives and whose occupations admit of but little exercise being most subject to its attacks - and from its being a symptom of Plague, Yellow fever, Small pox &c - - 3d Of the exciting - That state of the system constituting predisposition was formerly considered by Physicians as disease itself but late and more accurate investigators of the healing art have shewn it is only its precursor, for disease consists in action and that irregular and predisposition only an increased aptitude to action. It must then be evident in order that disease should be produced that certain causes must interfere to excite the system into action, these are called the exciting causes. They are, all the remote that have been mentioned, violent and sudden exertion of the lungs, as in hallooing, singing, laughing &c, great heat, sudden vicissitudes from heat to cold or vice versa, the ~~stimulating~~ passions of the mind, diminution of the weight of the atmosphere especially when concurring with exercise, as in ascending a mountain, external

violence, prepare from bed clothes &c &c 4th of the proximate. It will not surprise us to find that this has been sought after by physicians of all ages as upon a knowlege of it seems to depend the cure of many disease to which the system is liable. Their researches have been followed by various results, some attributing it to a lector of the fluids obstructing the vessels, some to morbific matter in the system, while some ascribe it to an acrimony of the fluids, others again to a spasm affecting the extreme arteries — Among this number may be ranked the Professor of the Institutes & practice in this University; he makes it to consist in nothing more than irregular, morbid or wrong action and it is immaterial whether that action exists in the arterial, nervous, lymphatic or any other system it still constitutes the essence of disease

Of the Symptoms. — As in many other diseases so in this we find two states each of which demands a seperate mode of treatment; they have been called by Stahl and since by Cullen the active and passive states, but I shall with the professor of the Institutes & practice term them "states of great and weak morbid action" — The first generally comes on with a sense of heat and weight in the chest attended with a dull and sometimes acute pain some difficulty of breathing, coldness of the extremities, pain in the back & loins

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costiveness, flatulency, lapitude and sometimes a salitish taste is perceived in the mouth. These symptoms having continued some short time a degree of irritation is now felt at the top of the larynx and along the inside of the trachea, this induces a cough which brings up blood of a florid colour from its having been just exposed to the influence of the air in its passage thro' the extremities of the pulmonary artery, it is also of a frothy appearance from the admixture of air with it in the bronchia. In general the blood brought up in this manner is at first in small quantities but in some cases it is thrown up in very large quantities from the commencement producing a noise similar to air passing thro a fluid, Sometimes it ceases spontaneously but more frequently is checked by the remedies to be mentioned hereafter.— In this state of the disease if we attend to the pulse it will be found frequent, quick and tense, sometimes full and round without tension or with a tense but small stroke.— If the discharge has been very profuse or has continued sometime even in small quantities the symptoms of weak morbid action come on, here the pulse sinks and becomes small and frequent, the difficulty of breathing experienced in the first state increases to an alarming degree, the strength of the patient is greatly exhausted, the face assumes a pale aspect, the extremities more cold, syncope, hemorr

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and convulsions succeed and finally death closes the scene. –

As before observed we should determine accurately on the source of the blood as it is not always from the lungs but proceeds frequently from the inside of the mouth, posterior nares, fauces and stomach. To do this we need only observe the particular circumstances attending each, viz.: When the blood is from the inside of the mouth it is thrown out without hawking, when from the posterior nares & fauces 'tis for the most part brought out by hawking and by inspecting the inside of the mouth the bleeding vessel can be seen; hemorrhages too from these parts are more rare than those from the lungs and are seldom attended with any febrile action. When the blood is from the stomach it may be known from the above mentioned symptoms not occurring, but instead of them being attended with oppression and sickness at stomach pain anxiety and a sense of great weight referrible to the region of that viscus, from the dark and grumous appearance of the discharge and its being sometimes mixed with alimentary matters. –

Of the cure of hemoptysis. – Our success in the treatment will depend much upon the causes which have induced it as from some it is attended with little danger while from others the greatest is to be feared.

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The remedies I shall divide into two heads and adapt them to its 2 states, and first, In its state of great morbid action; these are all such as abstract stimuli and thereby diminish the irregular or convulsive action of the bloodvessels and such as divert morbid action from the lungs to parts less essential to life. And first, Of Venesection, - This is most to be depended upon in this disease as it is speedy in its operation and more quickly reduces the morbid excitement in the bloodvessels. - The state of the system as minuted by the pulse should govern us in its use; if tense or full small and repeated bleedings should be our chief dependence,* "sometimes it is natural and the lungs are engorged, more bleeding is required here than at any other time". - Boerhaave used this remedy with success and was fully aware of its efficacy: On hæmoptysis says he generally decreases after V.S. may often quite stops unless some large branch of the pulmonary artery be torn or eroded, but as there is some reason to apprehend its return it will always be advisable to repeat the bleeding; the intervals between this operation, how frequently it should be repeated and what quantities may be taken can only be determined by the particular symptoms which the physician will be the best judge of." -

*Rush's Mss.

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The extent to which it may be carried might be shewn by the enumeration of cases in which it has been used successfully, but the case of Dr. Smith related in Phil. Med. Museum to which I refer will serve to establish this point. "There are some cases however of hemoptysis where it would be improper to bleed before the pulse is reduced by purging even if the pulse be tense"*

Cathartics. — In the choice of these we must be regulated by the state of the system. If no great degree of costiveness attend the milder sort may be used as glaubers salts, cremor tartar, castor oil &c but if the patient labours under much costiveness the more active kind will be necessary as calomel & jalap &c these act by creating an artificial weak part & they invite morbid excitement from the lungs to the bowels. Hoffmans case as stated in his practice vol 1st to which I refer serves to evince their efficacy in this disease.—

Emetics. — These prove useful by removing irritating and offensive matters from the stomach, by lessening the fullness of the blood vessels and equalizing the excitement of the system by inviting its excessive degrees from the blood vessels to the stomach and muscles. Dr. Brian Robinson of Dublin has used them in this disease; Dr Cullen followed his practice but having once failed of success he entirely renounced their use.

* Rush M.S.

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Dr. Barton has used ipecacuanha in combination with opium with efficacy not only in this but in hæmorrhages from the uterus, bowels &c.—

Nitrate of potash.— This operates not only by the nausea it produces but when in powder & dissolving in the stomach by the cold it generates, it lessens the energy of the circulation like cold water taken internally or externally applied. Dr. Dickson observes (Med. Observations) when speaking of nitre in the cure of this disease that its good effects have astonished him and that he can depend upon it as much, as bark in the cure of intermittents.— he gave it in form of an electuary with conserve of roses.—

Muriate of Soda. To the introduction of this apparently simple the officacious remedy into practice we are indebted to Dr. Rush who first administered it with the effect of checking hæmoptysis. His mode of giving it, is as soon as possible after the appearance of blood to give the patient a tea & table spoonfull of the finest kind which is generally sufficient repeating it daily for 3 or 4 days; if this quantity has not the desired effect he increases it to 2 table spoonfulls.— In a case which came under my notice I witnessed the efficacy of this remedy.—

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Saccharum Saturni.— This invaluable acquisition to the Materia Medica has of late years been ushered into notice, and the attention of the Medical world directed to its efficacy in hæmorrhagies by the Professor of Mat. Med. in this University. It seems to be his favourite prescription in all hæmorrhagies & particularly uterine & pulmonary, and the results of its administration in his hands even in the most desperate cases have been generally crowned with success. To prevent the unpleasant effects which sometimes attend its exhibition he is in the habit of combining with it small portions of opium with which he says it may be given in larger doses and with the happy effect of obviating those troublesome symptoms.— In the hands of Dr. Reynolds of London it has also proved efficacious in hæmorrhagies particularly uterine. In one case of hæmoptysis he succeeded in checking the discharge with it when it had resisted V.S. nitre and other neutral salts & an abstemious diet. In testimony of its efficacy too we have the opinion of Sir G. Baker "that no medicine proves more powerful in restraining hæmorrhagies than saccharum saturni"; he gave it with tinct. opii with great success.—

Digitalis.— This medicine from its remarkable effect on the pulse

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would seem to be a valuable one in restraining hemorrhages. In the hands of some physicians it has proved serviceable. Dr. Fothergill used it in hemoptysis with efficacy. Dr. Fenian entertains the highest opinion of it in the cure of this disease also. To these may be added the experience of Dr. Currie of Liverpool and Dr. Barton. –

Cold applications. – Cold water has been frequently strongly recommended in an hemoptysis and some eminent Italian physicians have experienced the happy effects of it when boldly administered. "Dr. Martin Ghizi who practiced with reputation in Cremona among other useful observations relates two cases in which he administered it, and in the last with the happiest effects. A case of a youth who had a frequent expectoration of blood attended with a violent fever; after repeated bleedings and other remedies unsuccessfully applied he gave him water made extremely cold with ice, a cup of which was to be taken every quarter of an hour at least, in a few hours the hemoptysis ceased, the fever and cough abated and in a few days he entirely recovered." (Van Swieten Comment.)

Dr. Rush once stopp'd a profuse hemoptysis in himself by drinking a glass of very cold water. – Cold applied externally to the surface of the

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body will often have the same effect. The late Dr. Bond in this way put a stop to an hemoptysis which took place in himself, viz, by the application of a sheet made completely wet with vinegar and water to the surface of his body.

cloths wet with vinegar & water and applied to the scrotum Dr. Rush tells us have had the happiest effects in checking the most violent and dis tressing cases. Hoffman has seen dangerous cases yield to cold water alone.

Blisters.— These have been found useful in this disease; they act by di verting morbid excitement from the lungs to parts less essential to life; they may be applied to the chest or extremities after the system has been reduced by V.S. to what has been happily called the blistering point.

Fear.— From the influence of this passion on the action of the heart and arteries we may suppose that if it could be properly regulated it would prove serviceable, hence Physicians have recommended it not only in this but other diseases.— Along with the use of these re medies the greatest attention should be paid to rest of body; exercise of all kinds should be strictly forbidden and more particularly of the lungs, as by talking, singing, coughing &c. If a cough attends we

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should endeavour to mitigate it by anodynes, demulcents &c. -
The diet should be very low, mild & cooling consisting principally of vege
tables, meats of all kinds should be strictly withheld as from their stimula
ting nature they would have a tendency to increase instead of diminish
ing morbid excitement. -
We come now to the second head, or, its state of weak morbid action
Under this head might be enumerated many medicines which act
by giving tone to the system but we shall only notice a few and those
cursorily as their effects are similar. - "They prove efficacious by exciting
action in the stomach, bowels, brain, nerves, muscles and skin, equalise
the excitement of the whole system and thereby indirectly destroy a weak
but morbid action in the bloodvessels by imparting to them more vi
gorous and healthy action" and first -
of Opium. - This stands highest as a remedy in weak morbid action
In its exhibition the pulse that cronometer of the system should strictly
be attended to and the dose &c should be regulated thereby. In its
exhibition the doses should be so regulated that the effects of the first
should not have worn off before a second should be given. —

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Wine. – This when the patient can take it should be exhibited when this class of medicines are indicated as it is one of the most agreeable and manageable stimulants we have. The quantity should be regulated by the state of the system, quality of the wine &c.

Bark. This should be given also in this state of the system as it has been found one of the most valuable remedies in it; the dose should be accommodated to the state of the system &c. –

Porter. – From the disposition of the stomach to retain this when other stimuli are rejected it should be entitled to our notice. The case of Dr. Smith formerly alluded to is a convincing proof of this he drank it alone for several months without experiencing from it any inconvenience. –

Acids, as possessing tonic powers, particularly the mineral may be administered alone or in combination with some of the afore mentioned medicines. – – To these Dr. Rush has added other medicines as, datura stramonium, British oil from 6 to 10 Drops this has proved useful says the Dr. when all other remedies have failed; oil of amber, emetics, blisters to the wrists, too much

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he says cannot be said of these, also a salivation. —

In addition to the above remedies the diet should be of a light and cordial nature as white meats of all kinds, oysters, &c. these alone have performed cures. They should be taken in small quantities and often so that an equable excitement may be presumed in the stomach. — — — — —

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